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# A Multi-Dimensional Analysis of Japanese Benefactives: The Case of the *Yaru*-Construction \*

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**Abstract.** This paper discusses the semantic and pragmatic properties of Japanese benefactives with the main focus on the *yaru*-construction. The benefactive sentence is judged to be acceptable if the transitive verb complement falls into a certain semantic class in which the meaning of transfer of possession is expressed. Hence, the distribution of the recipient role rather than the beneficiary role is crucial for determining the acceptability of the construction. To capture such a multi-dimensional linguistic information, HPSG account will be given.

**Keywords:** *yaru*-construction, beneficiary, recipient, transfer of possession, multi-dimensional architecture of HPSG

## 1 Introduction

In English, verbs such as *bake* are used ditransitively (Green, 1974; Oehrle, 1976; Levin, 1993):

- (1) a. Anna *baked* a cake (for Ken).  
b. Anna *baked* Ken a cake.

(1b) can only mean that Anna baked a cake with the intention of *giving* it to Ken, and this construction contributes semantics not attributable to the lexical items involved (Goldberg, 1995).

In Japanese, transitive verbs such as *yaku* ‘bake’ cannot be used ditransitively:

- (2) a. Anna-wa (Ken-no-tame-ni) keeki-o yai-ta.  
Anna-TOP Ken-GEN-benefit-DAT cake-ACC bake-PAST  
‘Anna baked a cake (for Ken’s benefit).’  
b. ?\*Anna-wa Ken-ni keeki-o yai-ta.  
Anna-TOP Ken-DAT cake-ACC bake-PAST

However, verbs of *giving* such as *ageru* in (3) allow the verb *yaku* to be associated with the constructional meaning of (1b), which is exemplified in (4).

- (3) Anna-wa Ken-ni keeki-o *age*-ta.  
Anna-TOP Ken-DAT cake-ACC give-PAST  
‘Anna gave Ken a book.’  
(4) Anna-wa Ken-ni keeki-o *yaite* *age*-ta.  
Anna-TOP Ken-DAT cake-ACC bake give-PAST

‘Anna baked Ken a cake. (Lit.) Anna gave to Ken the benefit of baking a cake for him.’

In (4), the main verb *ageru* takes the infinitive *yaite* which occurs adjacent to it. Literally, this construction means something like ‘X (the subject of *ageru*) gives to Y (the dative object of *ageru*) the *benefit* of (X’s) doing something for Y’, and is called the benefactive construction.

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In Japanese traditional grammar and in grammars for language learning, the unacceptability of (5) below is explained in terms of the mismatch between the benefactive interpretation construed by the construction and the concerned situation described by the object *gomi* ‘garbage’ (and the infinitive *yaite* ‘bake’):

- (5) \*Anna-wa Ken-ni *gomi-o* yaite age-ta.  
 Anna-TOP Ken--DAT garbage-ACC incinerate give-PAST  
 ‘Intended: Anna gave to Ken the benefit of incinerating garbage for him.’

That is, (Anna’s) *baking a cake* rather than *incinerating garbage* provides the benefit for Ken. In this case, to describe the situation in which Ken gets a benefit of incinerating garbage, a complex postpositional phrase *X-no-tame-ni* ‘for X’ benefit’ is used:

- (6) Anna-wa Ken-no-tame-ni *gomi-o* yaite age-ta.  
 Anna-TOP Ken-GEN-benefit-DAT garbage-ACC incinerate give-PAST  
 ‘(Lit.) Anna gave to Ken the benefit of incinerating garbage for him.’

This explanation, however, does not hold for the following sentences in which the given contexts conspire to give to Ken the benefit of Anna’s action described by the different transitive verbs, *sagasu* ‘hunt’ and *yameru* ‘quit’ with the same accusative-marked object *shigoto* ‘job’:

- (7) a. Context: Ken is not even trying to get a job and is just loafing around the house.  
 Anna-wa Ken-ni *shigoto-o* *sagashite* age-ta.  
 Anna-TOP Ken--DAT job-ACC hunt give-PAST  
 ‘(Lit.) Anna gave to Ken the benefit of hunting a job for him.’  
 b. Context: Ken wants Anna to become a stay-at-home wife.  
 \*Anna-wa Ken-ni *shigoto-o* *yamete* age-ta.  
 Anna-TOP Ken--DAT job-ACC quit give-PAST  
 ‘Intended: Anna gave to Ken the benefit of quitting her job for him.’

To show the intended meaning in (7b), the complex postpositional phrase as in (6) is present.

- (8) Anna-wa Ken-no-tame-ni *shigoto-o* *yamete* age-ta.  
 Anna-TOP Ken-GEN-benefit-DAT job-ACC quit give-PAST  
 ‘(Lit.) Anna gave to Ken the benefit of quitting her job for him.’

These observations immediately raises the question of what licenses the occurrence of the dative argument and what is the crucial factor determining the acceptability of these constructions.

In this paper, we suggest that there is a semantic restriction on the basis of which we can predict the distribution of the dative argument. More specifically, we suggest that if transitive verbs fall into the class VERB OF CREATION or VERB OF OBTAINING where the meaning of transfer of possession is expressed, the benefactive sentence is judged to be acceptable.

The paper is organized as follows. Section 2 shows some basic facts about Japanese benefactives. Section 3 presents the verb classification. Section 4 and 5 provides a formalization and a summary of the analysis presented in this paper.

## 2 The Distribution of the Beneficiary

### 2.1 Three Types of Japanese Benefactives

(4) is not the only form of the benefactive construction in Japanese. See other examples below:

- (9) a. Watashi-wa imooto-ni *keeki-o* yaite *yat-ta*.  
 I-TOP younger.sister-DAT cake-ACC bake give-PAST  
 ‘I baked my younger sister a cake.’  
 b. Imooto-wa watashi-ni *keeki-o* yaite *kure-ta*.  
 younger.sister-TOP I-DAT cake-ACC bake give-PAST  
 ‘My younger sister baked me a cake.’

- c. *Watashi-wa imooto-ni keeki-o yaite morat-ta.*  
 I-TOP younger.sister-DAT cake-ACC bake receive-PAST

‘I had my younger sister bake a cake.’

These constructions are formed using different verbs meaning ‘to give’ as in (9a) and (9b), or ‘to receive’ as in (9c). There are such seven verbs, as shown in Table 1.

**Table 1: Benefactive Verbs**

Politeness \ Type	I: ‘give’	II: ‘give’	III: ‘receive’
basic	<i>yarū</i>	<i>kureru</i>	<i>morau</i>
polite	<i>ageru</i>	–	–
honorific	<i>sashiageru</i>	<i>kudasaru</i>	<i>itadaku</i>

The benefactive verbs can be classified into three types cutting across different politeness levels. The polite verb *ageru* (type I) is used when talking politely to addressee. The honorific verbs indicate something about the speaker’s relationship with one of the verb’s arguments. For instance, *kudasaru* (type II) brings along the honorific contribution that the speaker regards a referent of the subject as socially superior to him. This meaning is independent of the constructional meaning of the benefactive sentence and thus we deal with only the basic verbs.

Benefactive constructions conceptually include two human entities, the one who performs an act for someone’s benefit (BENEFACTOR) and the one who receives the benefit (BENEFICIARY). In the sentences above, the BENEFACTOR is *watashi* ‘I’ in (9a) and *imooto* ‘younger sister’ in (9b) and (9c). The BENEFICIARY is *imooto* in (9a) and *watashi* in (9b) and (9c).

There are two types of (basic) verbs of giving, *yarū* (type I) and *kureru* (type II). *Yarū* ‘give’ is used when the situation is described from the subject (giver)’s point of view, whereas *kureru* ‘give’ is used when the situation is described from the indirect object (receiver)’s point of view.<sup>1</sup>

## 2.2 Restriction on the Beneficiary

A human participant represented as the indirect object of a ditransitive verb is naturally taken as the BENEFICIARY noun phrase when such a verb is used with a benefactive verb. In the following, Ken in (10a) and *watashi* ‘I’ in (10b) are easily construed as such.

- (10) a. *Anna-wa Ken-ni hon-o kashite yat-ta.*  
 Anna-TOP younger.sister-DAT book-ACC lend give-PAST  
 ‘Anna lent Ken a book.’
- b. *Imooto-wa watashi-ni kagi-o watashite kure-ta.*  
 younger.sister-TOP I-DAT key-ACC hand give-PAST  
 ‘My younger sister handed me a key.’

In the examples mentioned thus far, the BENEFICIARY has always been represented as the dative-marked indirect object. The direct object, which is marked by accusative *o* in (11a) and dative *ni* in (11b) below are also interpreted as the BENEFICIARY:

- (11) a. *Anna-wa Ken-o aishite yat-ta.*  
 I-TOP Ken-ACC love give-PAST  
 ‘(Lit.) Anna gave to Ken the benefit of loving him.’
- b. *Anna-wa watashi-ni atte kure-ta.*  
 Anna-TOP I-DAT meet give-PAST  
 ‘Anna took the trouble to meet me.’

In the following sentences, the BENEFICIARY can be the direct object, the indirect object as in (12a), or an adjunct as in (12b).<sup>2</sup>

<sup>1</sup> When the speaker is not involved, someone related to him holds the point of view. The ‘point of view’ of the constructions remains without any explanation but does not affect the analysis in the paper.

<sup>2</sup> Space is lacking for a full exemplification, and therefore we focus on the *yarū* (type I) construction in the following.



- b. Anna-wa Ken-ni kaadegan-o ande yat-ta.  
 Anna-TOP Ken-DAT cardigan-ACC knit give-PAST  
 ‘Anna knitted Ken his cardigan.’

Notice that the difference between (14a) and (14b) is that (*keeki-o*) *yaku* ‘bake (a cake)’ in the former is typically a VERB OF CREATION, like examples above, while in the latter (*gomi-o*) *yaku* ‘incinerate (garbage)’, whose process does not create anything, is a VERB OF CHANGE-OF-STATE.<sup>4</sup> Thus, (14b) contrasts with (14a) in which the same dative noun results in an grammatical sentence.

There are some other verbs which allow the occurrence of a dative noun. For example, (*keeki-o*) *kau* ‘buy (a cake)’ and (*sakana-o*) *tsukamaeru* ‘catch (a fish)’ do not describe the creation of products, but the following sentences which include these verbs are grammatical:

- (16) a. Watashi-wa imooto-ni keeki-o katte yat-ta.  
 I-TOP y.sister-DAT cake-ACC buy give-PAST  
 ‘I bought my younger sister a cake.’  
 b. Ken-wa Anna-ni sakana-o tsukamaete yat-ta.  
 Ken-TOP Anna-DAT fish-ACC catch give-PAST  
 ‘Ken caught Anna a fish.’

Aside from the classification of verbs, benefactive verbs bring out the RECIPIENT role implicit in the verb, and also assign the BENEFICIARY role to the argument, making it a part of the benefactive construction. In (16a), for example, the RECIPIENT role is not part of the argument structure for the verb *kau* ‘buy.’ Rather the argument *imooto* ‘young sister’ is implicitly included and can be made manifest with the help of the benefactive verb.

### 3.2 Transfer of Possession and Transferable Object

The contrast between (17a) and (17b) below shows the contribution of the benefactive verbs.

- (17) a. \*Ken-wa Anna-ni sakana-o hanashite yat-ta.  
 Ken-TOP Anna-DAT fish-ACC release give-PAST  
 ‘Intended: Ken released a fish for Anna’s benefit.’  
 b. Ken-wa Anna-ni sakana-o hanashite morat-ta.  
 Ken-TOP Anna-DAT fish-ACC release receive-PAST  
 ‘Intended: Ken had Anna release a fish.’

The sentences (16b) and (17a) are minimally distinct in the infinitive, but (16b) is judged to be acceptable, while (17a) is not. The unacceptability of (17a) is explained in terms of the mismatch of *transfer of possession* between the benefactive verb and the infinitive.

The benefactive verb describes an abstract transfer of ownership, which is coded as the verb semantics. The verb *yaru* ‘give’ implies such transfer from the subject to the *ni*-marked argument, so the *ni*-marked argument is construed as a GOAL/RECIPIENT. The verb *morau* ‘receive’, on the other hand, implies a reverse transfer, so the *ni*-marked argument is taken as a SOURCE, and the subject a GOAL/RECIPIENT. The infinitive *hanashite* ‘release’ also describes a reverse transfer of the possession of the *o*-marked argument, so the *ni*-marked argument is construed as a SOURCE. In (17a) and (17b), both *ni*-marked arguments are made manifest with the identical SOURCE role by the verb *hanasu*, even though they are the participants of events representing different orientations of transfer. This is why (17b) is acceptable, while (17a) is not.<sup>5</sup>

In the examples given so far, the sense of a concrete object being transferred is very strong. With other type of transitive verbs in the following, a more abstract kind of transfer is implied.

<sup>4</sup> Miyake’s (1996) Japanese verb classification does not correspond exactly with Levin’s (1993) English verb classification. The names of verb classes employed here are a translation from Miyake (1996) written in Japanese.

<sup>5</sup> In the series of the cognitive analysis (Shibatani, 1994; Shibatani, 1996), Shibatani has proposed that the crucial factor determining the acceptability of benefactive constructions is *the resulting possessive control of an entity on the part of the GOAL/BENEFICIARY*. Here we do not go into detail about his analysis, but we may reconcile a part of his idea with our proposal in Section 4.2. Admitting the plausibility of his approach, we leave the issue open.

- (18) a. Ken-wa Anna-ni ana-o hotte yat-ta.  
 Ken-TOP Anna--DAT hole-ACC dig give-PAST  
 ‘(Lit.) Ken gave to Anna the benefit of digging a hole for her.’  
 b. Watashi-wa imooto-ni uta-o utatte yat-ta.  
 I-TOP y.sister--DAT song-ACC sing give-PAST  
 ‘(Lit.) I gave to my young sister the benefit of singing a song for her.’

In (18a) and (18b), what is transferred to the RECIPIENT is the possession of a hole and the content of a song respectively. The abstract transfer of ownership also can account for the contrast between (19a) and (19b).

- (19) a. Anna-wa Ken-ni shigoto-o sagashite yat-ta.  
 Anna-TOP Ken--DAT job-ACC hunt give-PAST  
 ‘(Lit.) Anna gave to Ken the benefit of hunting a job for him.’  
 b. \*Anna-wa Ken-ni shigoto-o yamete yat-ta.  
 Anna-TOP Ken--DAT job-ACC quit give-PAST  
 ‘Intended: Anna gave to Ken the benefit of quitting her job for him.’

In (19a), the dative noun, i.e. the RECIPIENT of the verb *sagasu* ‘hunt’ occurs, so an abstract object *shigoto* ‘job’ is able to be transferred to it. In (19b), on the other hand, such a role is not included in the verb *yameru* ‘quit’ and it can neither be made manifest with the help of the benefactive verb.

When neither concrete nor abstract transfers to a RECIPIENT are construable, the benefactive sentence is judged to be unacceptable.

## 4 Nature of the Predicative Complement

### 4.1 Morphological Status of the Predicative Complement

The benefactive constructions have attracted much less attention than passive and causative constructions in Japanese linguistics (Kuno, 1973; Nakau, 1973; Inoue, 1976; Shibatani, 1978; McCawley and Momoi, 1986; Gunji, 1987; Fukushima, 1990; Terada, 1990; Uda, 1994; Matsumoto, 1996). Passive and causative predicates are formed by a stem verb followed by a bound morpheme. Benefactive predicates, on the other hand, are seemingly composed of an infinitive (V1) followed by *te* which is arguably a marker, and an auxiliary verb (V2). However, the syntax of the infinitive complementation, where the V1 in the sentence final verb cluster is semantically a complement of V2, has long been an issue in Japanese generative grammar. This construction falls between the sentential complementation and lexical complex predicates.

For phenomena such as (i) adverb placement, (ii) scrambling and (iii) right-node raising, it lines up with typical complex predicates in that the V1 and the V2 form a tight lexical unit. On the other hand, with respect to another set of phenomena such as (iv) embedded VP coordination, (v) focus particle insertion and (vi) reduplication, the construction lines up with typical sentential complementation in that the V1 and V2 do not behave like a lexical unit.

### 4.2 Intentionality and Possessive Control

Regarding to the *transfer of possession* discussed in Section 3.2, (20a) and (20b) show a contrast.

- (20) a. I baked a cake for Max, but now that you’re here, you may as well take it.  
 b. \*I baked Max a cake, but now that you’re here, you may as well take it. (Oehrle, 1976)

Since only (20b) means the intention of giving it to Max, it results in an ungrammatical sentence. (21) also shows the same point.

- (21) Watashi-wa imooto-ni e-o kaite yat-ta.  
 I-TOP younger.sister-DAT picture-ACC paint give-PAST  
 ‘I painted my younger sister a picture.’

*Watashi* ‘I’ must be understood as intending to give the picture to my sister. It cannot be the case that I painted the picture for someone else and later happened to give it to my sister. This shows that the volitionality must extend so that not only is the action described by the infinitive performed agentively, but also with the relevant transfer of possession implied by the benefactive verb.

### 4.3 VP-Embedding Control Structure under HPSG

To provide a syntactic and semantic generalization concerning Japanese verbs which seem to induce obligatory control on their complement predicates, Fukushima (1990) extends the VP-embedding approach (Gunji, 1987) and offers a simple and more plausible characterization of obligatory control phenomena based on the control theory of HPSG (Pollard and Sag, 1994).

The following (22) represents the partial information of the sentence in (21). It is different from the standard HPSG’s feature structure, which has been modified based on the studies of Fukushima (1990) and Uda (1994), and also simplified for explanation purposes.

- (22) 
$$\left[ \begin{array}{l} \text{PHON } yatta \\ \text{HEAD } verb[VFORM \textit{past}] \\ \text{SUBCAT } \langle PP[nom]:[1] [5], PP[dat]:[2], VP \left[ \begin{array}{l} \text{PHON } kaite \\ \text{HEAD } verb[VFORM \textit{inf}] \\ \text{SUBCAT } \langle PP[nom]:[5], PP[acc] \rangle : [3] [4] / [-] \rangle \\ \text{CONT } creation[PAINT] \end{array} \right] \\ \text{ADJACENT } [4] / [-] \\ \text{CONT } \left[ \begin{array}{l} \text{RELATION } commitment[GIVE] \\ \text{EXT-ARG } [1] \\ \text{COMMITTOR } [1] \\ \text{COMMITTEE } [2] \\ \text{SOA-ARG } [3] [EXT-ARG \textit{refl}[INDEX [5]]] \end{array} \right] \\ \text{MODAL } \left[ \begin{array}{l} \text{RELATION } affect/benefit \\ \text{BENEFICIARY } \neg [1] \\ \text{SOA-ARG } [3] \end{array} \right] \end{array} \right]$$

The HPSG control theory is based on coindexing between the unexpressed subject argument of the complement and the controller. The controller selection is based the semantic class of the verb, which is given below (with Fukushima’ (1991) verb classification):

- (23) a. *influence-type* [object]: *morau* ‘receive’, *saseru* ‘make’, *settokusuru* ‘persuade’, ...  
 b. *commitment-type* [subject]: *ageru* ‘give’, *kureru* ‘give’, *yakusokusuru* ‘promise’, ...  
 c. *orientation-type* [subject]: *tai* ‘want’, *yuchoosuru* ‘insist’, *kimeru* ‘decide’, ...

The semantic CONTENT value of all the verbs in class (23a) consists of a relation of *influence* type and three semantic roles, which are referred to as *influence* (the agentive influencer), *influenced* (the recipient of the influence, typically animate), and *soa-arg* (the action for the influenced participant to perform). Similarly, the *commitment-type* verbs in (23b) all involve a participant playing the *committor* role, an optional participant for the *commissee* role, and a *soa-arg*.

The semantic generalizations underlying the controller assignment are stated as in (24).

- (24) HPSG control theory  
 Given a *soa*: 
$$\left[ \begin{array}{l} \text{RELATION } R \\ \text{SOA-ARG } [EXT-ARG \textit{refl}[INDEX [1]]] \end{array} \right]$$
  
 if *R* is of sort *influence*, *commitment*, or *orientation*,  
 then the value of the *influenced*, *committor*, or *experiencer* role respectively is  $[INDEX [1]]$ .

HPSG’s control theory offers an account of not only the optionality and animacy requirement of the GOAL (RECIPIENT) argument but also the intentionality shown in 4.2.

Regarding the newly introduced ADJACENT and MODAL features, the former deals with the word order phenomena, which we set aside in Section 4.1, and the latter captures the distribution of BENEFICIARY examined in Section 2.2. The refinement of the verb classification in Section 3.1 and 3.2 contributes to eliminate the redundancy between argument structure and lexical semantics.

Thus, HPSG’s multi-dimensional constraint-based architecture is well-suited for representing linguistic information which interacts with syntax, semantics and pragmatics in principled ways.



## 5 Concluding Remarks

In this paper, we have examined benefactive constructions, particularly *yaru* constructions. We have presented that no clear syntactic configuration is available to code the BENEFICIARY. We also have shown that the benefactive sentence is judged to be unacceptable, when neither concrete nor abstract transfers to a RECIPIENT are construable. In addition, we have attempted to describe those pragmatic and semantic features under HPSG which is well-suited for representing such a multi-dimensional linguistic information.

Our central claims are (1) that the distribution of the RECIPIENT role rather than the BENEFICIARY role is crucial for determining the acceptability of benefactive constructions, and (2) that these constructions are judged to be acceptable if the verb complement of *yaru* falls into a certain semantic class in which the meaning of *transfer of possession* to the RECIPIENT is coded.

## References

- Fukushima, K. 1990. VP-Embedding Control Structures in Japanese. *Grammatical Relations: A Cross Theoretical Perspective*, 163-182. Stanford, California: CSLI Publications.
- Goldberg, A.E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.
- Green, G.M. 1974. *Semantics and Syntactic Regularity*. Bloomington, Indiana: Indiana University Press.
- Gunji, T. 1987. *Japanese Phrase Structure Grammar: A Unification-based Approach*. Dordrecht: D. Reidel.
- Inoue, K. 1976. *Henkeibunpoo to Nihongo, Joo: Toogokoozoo o Chuushin ni* [Transformational Grammar and Japanese 1: Syntax], Tokyo: Taishukan.
- Kuno, S. 1973. *The Structure of the Japanese Language*. Cambridge, Massachusetts: The MIT Press.
- Levin, B. 1993. *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: The University of Chicago Press.
- Matsumoto, Y. 1996. *Complex Predicates in Japanese*. Stanford, California: CSLI Publications.
- McCawley, J.D. and K. Momoi. 1986. Constituent Structure of *-Te* Complements. *Working Papers from the First SDF Workshop in Japanese Syntax*, 97-116. University of California, San Diego.
- Miyake, T. 1996. Nihongo no Jueki Koobun ni tsuite [On Benefactive Constructions in Japanese]. *Kokugogaku* [Studies in the Japanese Language], 186, 1-14.
- Nakau, M. 1973. *Sentential Complementation in Japanese*. Tokyo: Kaitakusha.
- Oehrle, R.T. 1976. *The Grammatical Status of the English Dative Alternation*. Ph.D. thesis, MIT.
- Pollard, C. and I.A. Sag. 1994. *Head-Driven Phrase Structure Grammar*. Chicago: The University of Chicago Press.
- Shibatani, M. 1978. *Nihongo no Bunseki: Seiseibunpoo no Hooohoo* [An Analysis of Japanese: The Method of Generative Grammar]. Tokyo: Taishukan.
- Shibatani, M. 1994. Benefactive Constructions: A Japanese-Korean Comparative Perspective. *Japanese/Korean Linguistics*, Vol. 4, 39-74. Stanford, California: CSLI Publications.
- Shibatani, M. 1996. Applicatives and Benefactives: A Cognitive Account. *Grammatical Constructions: Their Form and Meaning*, 157-194. Oxford: Clarendon Press.
- Terada, M. 1990. *Incorporation and Argument Structure in Japanese*. Ph.D. thesis, University of Massachusetts.
- Uda, C. 1994. *Complex Predicates in Japanese*. New York: Garland Publishing.